AN ANALYSIS OF A PROGRAM TO IDENTIFY AND QUANTIFY STANDARDS OF PERFORMANCE FOR US ARMY HOSPITAL FOOD SERVICES FOR THE PURPOSE OF QUALITY ASSURANCE

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This study attempts to analyze whether a "Self-Assessment Survey" method, to measure food service quality and identify potential problem areas, can be considered an effective and efficient Quality Assurance tool.

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I. INTRODUCTION

In recent years there has been an increasing emphasis on quality assurance/risk management in the health care industry.

The drive behind this trend is complex but many factors can be identified as contributory. Among the causal factors are a dramatic increase in the number of malpractice claims, an increase in Governmental regulations, and initiatives by third party payers to insure receipt of quality services by their beneficiaries. These factors seem to strongly indicate that the American public is becoming more and more aware of what quality health care is and that the health care industry may not always provide the best quality possible.

In the competitive non-health care sector, in a normal market, the economic system tends to act as a quality assurance system, particularly in highly competitive industries such as Food Service. This is illustrated by the fact that over 50 percent of all restaurants that open in the United States each year fail. If they do not provide what the consumer expects they are not patronized.

The health care industry, including the Food Service segment, has in the past been somewhat isolated from this phenomenon because the consumer did not know what health care he should receive and what constituted quality health care. In addition, the consumer has been continually reassured by practitioners, hospitals, professional organizations, etc., that he was

receiving the finest care and services possible. As the educational level of the public has risen and resources have become scarcer, the once unquestionable industry "health care" has begun to be questioned and held accountable for the products and services it provides.

The industry response to increased accountability has been the development of risk management/quality assurance programs and the inclusion of quality assurance/risk management standards in the Joint Commission on Hospital Accreditation Standards.

The emphasis on quality assurance/risk management in the military health care setting has begun to equal that of the civilian sector for similar reasons. The taxpayer and the consumer want assurance that they are receiving the quality they are paying for or are entitled to.

Army Hospital Food Service, as have most areas within the Army Medical system, has been subjected to scrutiny, resulting in a recognition of a need for quality assurance and risk management. The difficulty with the development of a quality assurance/risk management program or plan for Food Service though, is that quality has not been quantitatively defined. Thus, the relationship between resources (input) and quality (output) is unknown. Since quality indicators have not been clearly defined it has been impossible to establish an effective quality assurance/risk management program for an Army Hospital Food Service Division.

THE PROBLEM

Statement of Purpose

A study titled "The Measurement of Management Success and Quality in US Army Hospital Food Service" was conducted by the researcher during the March - June 1981 time period.[1]

The object of the study was to identify possible qualitative indicators of food and nutritional service quality and using these indicators, develop an instrument (survey) to identify problems or potential problems that may effect the quality of food and nutritional service.

The objectives of the study were accomplished with the development of a "draft" of a "Self-Assessment Survey" intended for use by Army Hospital Commanders, Executive Officers and Chiefs of Food Service to measure food service quality and identify potential problem areas.

The question addressed by this research project is to study the practicality of the "Self-Assessment Survey" and determine if it:

1. Identifies problems or potential problems that may effect quality.
2. Indicates food and nutritional service quality.
3. Is an effective and efficient quality assurance tool.

Specific objectives of the study were as follows:

1. Revise the format of the "Self-Assessment Survey," if necessary, to facilitate its use.

2. Prepare a manual for the survey to provide the user with (a) instructions on how to collect data and other necessary information, and (b) the necessary steps to complete the "Self-Assessment Survey."

3. Field test the survey in approximately six Army Medical Treatment Facilities.

The overall goal was to determine if the "Self-Assessment Survey" does identify problems, potential problems, or potential problem areas, and if there is a correlation between the survey and the quality of food and nutritional service provided.

Origin and Importance

The author has worked in various aspects of US Army Hospital Food Service for the past twelve years and has visited a large number of the Army hospitals. He has noticed a variance in the quality of food and nutritional services offered. It has also been observed that there seems to be a lack of a valid mechanism to provide:

1. Indications of quality.

2. Indications of problems.

3. Standards (external and past performance) upon which management efforts can be directed toward and measured against.

4. Standards that can be used to provide an equitable evaluation of the food service.

Army Food Service management efforts often seem to be haphazardly directed toward perceived "problems" without a systematic approach (except those locally developed) to identify and validate problems. Once a problem is identified and validated, a system or technique is often lacking to measure success resolving the problem and monitoring the area to prevent reoccurrence.

In recent years there has been significant interest in contracting Army Hospital Food Service operations. The lack of a formalized program to measure and analyze food service operations has resulted in the limited availability of information with which to defend existing food services (economically and qualitatively). Thus, the author feels that it is paramount that the following occur if an effective in-house hospital food service is to exist in the future:

1. A comprehensive coordinated program be developed by each food service to insure quality food, service and treatment.

2. A method be established by which Chiefs of Food Service, Commanders, Executive Officers and Health Services Command can identify areas in which a food service may not be meeting its mission or may not be meeting it in the most efficient and effective manner.

3. A method be devised that can provide a basis for comparison of Army Hospital Food Services between themselves and against similar civilian food services.

The importance is obvious. To meet JCAH Standards and stave off contracting facts are essential. The Department of the Army and Defense, the Office of Management and Budget, and the Congress is not interested in unsubstantiated opinions. Measurement of various management and quality indicators, which the commercial civilian food service industry has been doing for years, is essential.

Assumptions

It is assumed that the basic study from which the "Self-Assessment Survey" was constructed did identify sufficient indicators of Food and Nutritional Service quality to provide a valid picture of the quality of the Food Service Division in a Army Medical Treatment Facility.

Limitations

The major limitations of the study were the length of time over which the data were collected and the small number of test sites. Most of the data that were required by the "Self-Assessment Survey" is not available historically and thus had to be collected during the test period. Thus, because of the lack of historical data and the relatively short test period it is unlikely that any long-term trends were identified. The sample size was limited by the ability of the researcher to visit facilities and the complexity of the data collection effort. The small sample size, thus qualifies the conclusions that can be drawn from the data because it is uncertain whether the participants are representative of the total population.

REVIEW OF LITERATURE

Management in commercial food service (and many other competitive industries) has recognized a need for quality assurance/risk management for years and has made an effort to develop management indicators and systems to identify problems and correct them. Their efforts are intended to insure survival and profitability. Examples of these techniques are financial ratios, centralized training programs, unannounced inspections, market surveys, patron surveys, etc.

The survival and profitability of the health care industry has not been threatened until recently. In the past various individuals and groups (i.e., physicians, dentists and their professional organizations) have succeeded in telling the public what its needs for health care are, what the industry is capable of providing, and the quality and cost of what is provided.

In the 1960's the situation began to change. The public, governmental agencies, third party payers, consumer groups, etc., began to demand better, more effective, and efficient health care. The result has been that the industry has begun to respond and realize that like other industries it must establish a mechanism to assure quality, reduce risk, and market its products and/or services.

Hospital Food Services, although in many ways similar to commercial food service, have generally not had a formalized quality assurance/risk management program. At present their programs are generally in the same early developmental stage as those in the rest of the hospital.

Dr. E. Thompson stated at the recent American College of Hospital Administrators' Congress that the development of health care quality assurance/risk management programs is in its infancy.[1]

Dr. Thompson continued by saying that first we must define what quality is, secondly define what an acceptable level of quality is, and third, "put some teeth" into our quality assurance programs and mechanism.[2]

As with most new programs the early development of quality assurance/risk management has been somewhat confused. Programs were quickly put together and the initial feeling was that the development of a quality assurance program presented no major problems.

Early quality assurance efforts in Hospital Food Service were similar to those throughout the hospital. The programs that were developed demanded a substantial amount of time, were not very successful and did not result in measurable improvement. True objectives (problems) were not identified. Thus, something that seemed simple: identification of customer (physician, patient, community) values, needs, and requirements or

indications of these factors, proved to be quite difficult. The system that had been developed by the commercial branch of the industry could not be adopted to the administrative areas of a hospital food service, (it may be adaptable) and did not address the medical- nutrition aspects of the clinical area at all.[3]

To develop a quality assurance/risk management program, criteria and standards must be identified. A manner to measure them must then be developed and their acceptable levels determined.[4]

The obvious criteria are those that have been formalized. Federal, state, and local laws deal with a wide variety of subjects such as safety standards, sanitation requirements, labor management, etc., that provide some necessary criteria. Other formal requirements and criteria are included in JCAH standards, hospital board policies or Army Regulations.

The difficulty is ascertaining criteria that are not formalized or are hard to quantify. For example, what are the criteria for "quality" food? It depends on whose definition of "quality" is being discussed. To the comptroller quality food may be that which fits the budget, while to the physician it may be that which supplies sufficient nutrients or keeps the patient from complaining. Some of the criteria that must be ascertained that may not be easily defined are; timeliness of food delivery or service, attractiveness of the food, flexibility in time and type of food service and attitudes of food service personnel.[5]

The important point is to identify all expectations and, as objectively as possible, estimate their relative importance. The result should be that the most important criteria are directly linked to satisfying the needs of the customers and/or functions that the food service actually serves.

The design of a risk management/quality assurance program must be compatible with the organization for which it is constructed. Henry Mintzberg in his article "Organization Design: Fashion of Fit?" describes five types of organizations; a simple structure, a machine bureaucracy, a professional bureaucracy, a divisionalized form, and an adhocracy configuration.[6] Mintzberg identifies a hospital as a professional bureaucracy which, in most cases, the author agrees with. One of the major points Mintzberg makes is that technocratic standards imposed on a professional bureaucracy are the worst way to correct deficiencies. When we analyze the subsystems of a hospital or other health care institution, though, it becomes evident that there are a number of different design structures present, including a machine bureaucracy and an adhocracy configuration, though the predominant structure is probably a professional bureaucracy.

An analysis of the typical food service division bears this out. Food service (or dietary) normally has two major functions, the preparation and service of food (the administrative function) and nutritional care of the patient (the clinical function). As Mintzberg pointed out, the administrtive function lends itself well to a machine bureaucracy as in the case of McDonalds.[7]

The clinical aspect lends itself to the type of organization that is prevalent in the direct patient care areas, usually a professional bureaucracy. Thus, care must be taken to consider these differences when constructing a risk mangement/quality assurance program for the food service activity.

The Criteria

There are a number of different approaches to risk management/quality assurance in hospital food service that are dependent on the overall plan of the institution; the needs and values the plan is intended to meet; the organizational design of the food services subsystems and the larger system of which the food service is a part. With these considerations in mind, a quality assurance program should be composed of the following essential components which have been taken from the 1982 JCAH Standards and supplemented to meet the previously discussed criteria. The program should result in the following:

"1. Identification of important or potential problems, or related concerns in the care of patients [and in the performance of all other legitimate functions of the activity].

2. Objective assessment of the cause and scope of problems or concerns including the determination of priorities for both investigating and resolving problems.

3. Implementation, by appropriate individuals or through designated mechanisms, of decisions, or actions that are designed to eliminate insofar as possible identified problems.

4. Monitoring activities designed to assure that the desired results have been achieved and sustained.

5. Documentation that reasonably substantiates the effectiveness of the overall program to enhance patient care, to assure sound clinical performance, (and to assure satisfactory accomplishment of all other objectives).

6. [Be complimentary with the overall institution's risk management/quality assurance program.]"[8]

As previously mentioned there are usually two organizationally different functions within institutional food service: the clinical function and the administrative function. Because of their nature each function seems to require a different approach to risk management/quality assurance.

The Administrative Function

The administrative function includes the purchase, storage, preparation and service of food to patients, staff, etc. This area is a production or manufacturing function and lends itself to process control and standardization as evidenced by the consistency and success of the large restaurant chains in the United States. Great food is an art and cannot be standardized but good food can. Since the goal of almost all health care food services is to serve good food, standardization seems to be the answer.

It appears from the review of the literature that the emphasis in administrative risk management/quality assurance programs in institution food services is the same, to identify

past problems and correct them. The major tool often seems to be a retrospective audit. Although retrospective identification of problems should be a part of any program, the ideal would be to identify and correct potential problems before they occur. This is particularly important when consideration is given to the fact that lawsuits and bad publicity are not based on correction of an accident (i.e., a case of food poisoning) but on the occurrence. This has been the emphasis of non-health care food service and should be that of health care food service.

A number of different approaches have been taken to quality assurance in the administrative areas. Attempts have been made to structure programs on the management functions, planning organizing, staffing, directing and controlling, as suggested by Schiller and Behm in their articles "Auditing Dietetic Services."[9]

The Clinical Function

The clinical segment of an institutional food service is similar to other professional areas of the hospital and favors a professional bureaucracy or adhocracy configuration, as the situation warrants. As delineated by Mintzberg, external technocratic standards are the worst way to correct deficiencies. The identification of deficiencies, communication and training or replacement are the correct ways to achieve improvements.[10]

It seems logical that if Mintzberg is correct that the thrust of the clinical risk management/quality assurance program should be to insure communication, documentation and training. Therefore, the criteria, approach, and quality assurance program tnat are developed for the clinical area must by nature be different than that developed for the administrative area.

The tendency in the clinical nutrition area has been toward excessively detailed audits that try to emulate commercial production standards, for example the Patient Care Audit, published by the American Dietetic Association.[11] The result has been, from the author's experience, a system that is so cumbersome that it often stifles individual practitioners, decreases the amount of patient/practitioner contact, and is unresponsive to problems because of the amount of time between problem occurrence and identification.(if it identified any problems). The failure of the audit system to produce results has been recognized in many areas and resulted in a change in JCAH Standards in 1978.[12] Thus, in the clinical nutrition area the same situation exists as in many parts of the hospital. Desired results and associated criteria must first be defined and quantified and then a quality assurance program established.

Efforts have been made to adapt programs utilized by the commercial food service industry and other sections of the hospital. Some of the programs and methodology have been useful but for the most part quality assurance programs in hospital food service have not produced the desired effect. It is beginning to be realized that although some of the commercial techniques may be useful, in the absence of the profit motive and with the addition of the medical environment a new approach must be developed. Thus, before a quality assurance program is developed the divergent components of a successful hospital food service must be defined and quantified. Efforts are being made in that direction, this study being a part, but results have not as yet been reported.

There seems to be little disagreement with the stated need for quality assurance/risk management in the hospital setting. It appears that both the civilian community and the Army have recognized that quality assurance/risk management is not as simple as it originally seemed and that the health care industry is only now taking the first step.

RESEARCH METHODOLOGY

The goal of this study was to test the validity of the Hospital Food Service self-assessment survey (Appendix A) that the researcher had previously developed. Specific emphasis was placed on an attempt to determine the relationship between a level of quality and specific qualitative indicators. Additional objectives were to prepare a users manual for the survey (Appendix D) and revise the survey format as appropriate.

Secondary objectives were accomplished first by revising the survey, preparing the manual, and testing them in the Food Service Division at the Fort Polk Community Hospital. In addition, comments on the manual and self-assessment survey form were solicited from the sites that tested the self-assessment survey.

The actual test of the "Self-Assessment Survey" was accomplished in seven Army hospitals. Test sites were:

1. Brooke Army Medical Center, Fort Sam Houston, Texas.

2. Darnell Army Community Hospital, Fort Hood, Texas.

3. Leonard Wood Army Community Hospital, Fort Leonard Wood, Missouri.

4. Munson Army Community Hospital, Fort Leavenworth, Kansas

5. Madigan Army Medical Center, Tacoma, Washington.

6. Silas B. Hays Army Community Hospital, Fort Ord, California.

The test sites were selected in coordination with the Dietetic Consultant, US Army Health Services Command. Test site selection was based on the following criteria:

1. The test sites should be representative of the various sizes and types of Army hospitals. Specifically at least one Medical Center, large MEDDAC, medium-sized MEDDAC and small MEDDAC were to be represented.

2. The Chief of Food Service was not expected to rotate (move) during the test period and was willing to participate.

Specific information on each test site is contained in Appendix E. After selection a letter was sent to each hospital Commander by the US Army Health Services Command requesting participation in the research project (Appendix F). All hospitals agreed to participate without reservation. A visit to all hospitals was made in late October and early November by the researcher to explain the purpose of the research and the procedures to be used to the Executive Officer, the Chief of Food Service, and his/her staff. Data were collected in the following manner:

1. Each Chief was requested to accomplish the following on a monthly basis for the months of November 1981 through March 1982.

(1) Survey Dining Hall customers, patients eating on the ward, and patients seen in the Nutrition Clinic on the survey form provided by the researcher (specific survey procedures that were used are contained in the "Self-Assessment Survey Manual" which is at Appendix C).

(2) Complete the "Self Assessment Survey" on a monthly basis in accordance with the manual and mail it to the researcher.

(3) Complete the "Dietetic Services" Section of the Program on Hospital Accreditation Standards (PHAS) Manual once during the test period and return it to the researcher (Appendix D).

2. The Administrative residents at each test site were requested in March 1982 to conduct a survey (one) of the providers on their attitudes toward dietetic and nutritional treatment and services provided to patients in the test hospital. The survey form and survey instructions were provided by the researcher. The form and procedures are contained in Appendix J.

During the visits to the test sites and throughout the five month test period comments were solicited from those collecting data on survey format, usefulness, procedures and implementation instructions. Inpatient, cafeteria customers and patient treatment survey data were also collected at the Fort Polk Community Hospital for the purpose of observing reaction to surveys and enabling the researcher to make a personal subjective evaluation of food and nutritional services as compared to that indicated by the data collected. The data collected at Fort Polk are not as complete as that collected in the other hospitals for this reason.

FOOTNOTES

[1] Dexter V. Hancock, "The Measurement of Management Success and Quality in US Army Hospital Food Service." (Unpublished Paper, US Army Baylor University Program in Health Care Administration, 1981).

[2] Richard E. Thompson, M.D., President, Thompson, Mohr & Asociates, Inc., in a lecture given at Congress on Administration, American College of Hospital Administrators, Chicago, IL, 3 March 1982.

[3] Ibid.

[4] Joint Commission on Accreditation of Hospitals, "Prespectives on Accreditation," (Chicago: Joint Commission on Accreditation of Hospitals, May/June 1979). p.2.

5 Ibid., p. 3.

6 Thompson.

7 Henry Mintzberg, "Organization Design: Fashion or Fit?" Harvard Business Review, January-February 1981, pp. 103-116.

8 Ibid., p. 108.

9 Joint Commission on Accreditation of Hospitals, Accreditation Manual for Hospitals, 1980 Edition. (Chicago: Joint Commission on Accreditation of Hospitals, 1979), p. 152. Sections in parenthesis () were added by the author.

10 Rosita Schiller and Valerie Behm, "Auditing Dietetic Services," Hospitals, May 16, 1979, p. 118.

11 Mintzberg, p. 114.

12 Farah M. Walters, ed. and Sara J. Crumley, co-ed., Patient Care Audit A Quality Assurance Procedure Manual for Dietitians (Chicago: The American Dietetic Association, 1978).

II DISCUSSION

Quality in health care and food service is difficult to define. This is most likely due to the fact that both industries are based partially in art and partially in science. Thus, the scientific portion of the product (or service) can be quantified while the artistic portion is judged primarily on subjective factors.

In hospital food service the objective aspects are well defined and have been studied and discussed for years while the subjective areas have been essentially ignored. The feeling seems to be, as in most other areas in the hospital, that subjectivity has no place in the science of medicine. The approach is similar to Frederick Taylor's Scientific Management School which tended to ignore the human factor.

The Formal Standards

It is recognized that there are some quantifiable factors or standards that form the basis or foundation of a hospital food service that are applicable to all Army Hospital Food Services. These factors are contained in the following documents and include items such as resource utilization, disease prevention, and nutritional standards.

1. Army Regulations, in particular, AR 40-2, AR 40-5, AR 40-335, and AR 40-25.

2. Joint Commission on Hospital Accreditation Standards.

The subjective area of hospital food service is based on the consumer's perception. Food that is nutritious, clean, and prepared within budgetary restraints may be totally unacceptable to the consumer. Complicating the situation further is the fact that what may be acceptable to one consumer may be unacceptable to another.

All the test hospitals were found to meet the specific requirements of Army Regulations with only minor insignificant variances. This determination was based on Inspector General inspections reports, preventive medicine inspections, financial data supplied by the test facilities and by the US Army Health Services Command, and observations by the researcher during the visit to the test sites.

All test sites were found to be essentially in compliance with the standards of the JCAH with the possible exception of the Quality Assurance Standard. This determination was based on results of past JCAH surveys and the use of the "Dietetic Section" of the Program on Hospital Accreditation Standards (PHAS) Manual.

Compliance with formal standards was expected since these are the criteria presently used to evaluate Army Hospital Food Service. Information on these aspects is regularly provided to the Hospital Commander and Health Services Command in numerous formats. Deviations from these standards are normally quickly corrected.

The Measurement of Subjective Quality

To measure the subjective areas of food service and nutritional care quality it was decided that it would be necessary to survey the various customers to determine their opinion of the product and/or the service they were being offered. The customers were determined to be:

CUSTOMER	PRODUCT/SERVICE EVALUATED
1. Inpatient	Patient tray service
2. Inpatient/Outpatient	Nutritional counseling/ dietary treatment
3. Providers	Food service and nutritional counseling and dietary treatment provided to patients
4. Cafeteria Customer	Food and service in the cafeteria

All surveys (Appendix G through J) were conducted IAW the procedures outlined in the "Self-Assessment Survey" Completion Instructions (Appendix C) with the exception of the provider survey. Procedures for this survey are included in Appendix J with the questionnaire. Detailed survey results are also included in the Appendices.

Each survey asked a number of specific questions about the services and/or products being provided but no attempt was made by the researcher to evaluate specific responses since the only factor important to this study is the overall satisfaction with the service. Satisfaction was the last question on all questionnaires. The respondents were ask to rate the surveyed service as Excellent, Good, Fair or Poor.

Survey return was good and without exception the test facilities reported 70% return or better on all surveys distributed. The number distributed for a facility was that requested by the "Self-Assessment Survey" manual.

The five months of survey data was then averaged (four months of data for hospital B and E and three months for hospital G due to administrative errors in collection).

It is felt that the response averages of the monthly results present a fair representation of the general consumer opinion of the surveyed service or product.

The response averages were then converted to 15-point scale. Fifteen points were assigned to a rating of Excellent, ten points to Good, five points to Fair and zero points to Poor. The average percent expressing Excellent, Good, Fair and Poor were multiplied times the points for its category and the results were added to obtain a score (i.e., for hospital A, Inpatient Food Service 58% (15) + 30% (10) + 11.5% (5) = 13.78 points. Results are summarized in the following table:

TABLE 1

SUMMARY OF SURVEY RESULTS
Scale 0-15

	CUSTOMER			PRACTITIONER	
	Inpatient	Treatment	Cafeteria	Food Service	Nutritional Service
A.	13.78	14.13	9.01	8.38	12.10
B.	9.60	13.72	9.47	9.20	10.30
C.	8.75	11.91	10.85	10.00	10.20
D.	9.67	12.38	11.16	9.87	10.10
E.	10.81	12.15	11.63	10.25	10.25
F.	10.92	12.11	11.00	9.35	9.25
G.	8.90	13.60	8.83	----------Not Done---------	

As discussed the number of test sites is not sufficient to insure that the results are representative of all Army Hospital Food Services. Upon observation of the results though, the distribution of the scores is what might be expected and there seems to be an indication that the results show a definite difference between the hospitals, particularly in the Inpatient Food Service and Cafeteria Service areas.

The Self Assessment Survey

The format the "Self Assessment Survey" was revised (from the previous study) and seemed to work well. After the first month there seemed to be little problem with data collection and completion of the "Self Assessment Survey" and Chiefs of Food Service indicated that it did not impose much additional administrative burden.

The only comment on the "Self Assessment Survey" that was consistently received was that the cafeteria survey was conducted too frequently and that patrons were complaining.

Four of the seven test hospitals specifically stated that they found the "Self Assessment Survey" useful as a management tool and were using it to investigate or solve problems but did not need to complete all sections monthly.

It had originally been planned to attempt to determine if there was a statistical relationship between a specific management attribute or indicator as listed on the "Self Assessment Survey" and the quality of the hospital food service.

As the study progressed it became evident that the inter-relationship between the indicators was so close that such an analysis, especially with the small sample size would be impossible.

A basic assumption of this study is that the indicators on the "Self Assessment Survey" are areas of managerial concern that may effect quality if not performed or controlled. Upon analysis of the data no test hospital food service was found to be performing all of the tasks as envisioned and/or have all statistical indicators within the apparent norm, but two hospitals (C and G) had significantly more variations than the other hospitals. This indicates that although it may not be possible to equate quality with specific management practices or statistical indicators that the sum of these may very well indicate both the overall levels of subjective and objective quality. Additionally, the "Self-Assessment Survey" did identify that each hospital did deviate from the majority of other hospitals in at least one area. The deviation in itself may have no meaning without further investigation but it does give management an indication of a potential problem area.

SUMMARY

The results of the study seem to suggest the following:

1. Compliance with objective standards (ARs, JCAH, etc.) that have been traditionally used by the Army to evaluate hospital food service is good but does not guarantee or indicate consumer satisfaction.

2. A survey of hospital food and nutritional service customers indicated distinct variances between the test sites, but there did not seem to be a tie between one customer (patient, provider, etc.,) satisfaction area and another within a hospital. For example, Hospital A had very high scores in inpatient food service satisfaction and a low score on cafeteria patron satisfaction.

3. The results of the "Self-Assessment Survey" when viewed as a whole seem to provide an indication of the overall quality of an Army Hospital Food Service.

4. The "Self-Assessment Survey" identifies areas that may need management attention, assuming that there is a norm to compare with.

5. Not all data on the "Self Assessment Survey" needs to be compiled on a monthly basis.

III. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

To have an effective quality assurance/risk management program for any hospital food service, quality must be defined and measured, then deviations identified and corrected. Objective standards involving areas such as nutritional content of the diet, prevention of food borne illness and budgetary controls are well defined. The surveyed Army Hospital Food Services seem to be, for the most part, in compliance.

Success in dealing with the subjective areas of hospital food service seems to vary among Army Hospital Food Service. The use of the the "Self-Assessment Survey" and its associated instruments gives an indication of how well customer needs are being met and areas that may be impeding mission accomplishment. Thus the use of "Self-Assessment Survey" seems to provide a basis on which an effective quality assurance/risk management program for Army Hospital Food Service may be developed within existing resource constraints.

Recommendations

It is recommended that:

1. Standardized questionnaire such as those in Appendix G through I be used to survey patients, providers, and cafeteria customers in Army Hospital Food Service.

2. Each Army Hospital Food Service be required to conduct surveys using standardized questionnaires and procedures. The recommended frequency of the surveys are as follows:

(a) Inpatient Food Service - monthly>

(b) Patient Nutritional Counseling - each patient.

(c) Cafeteria Customers - quarterly.

(d) Provider - quarterly.

3. The summarized results of these surveys be submitted to the MACOM and the average scores (computed in a manner similar to that used in this study) for each survey be compiled and published.

4. A "Self Assessment Survey" be completed and maintained by each Army Hospital Food Service and that a performance summary be prepared by the MACOM on a yearly basis.

5. Each Army Hospital Food Service prepare a written quality assurance program. The crux of the program should be goal oriented and designed to both improve quality and solve specific problems.

6. Each Army Hospital Food Service prepare, as a part of its quality assurance program a report for the MTF Quality Assurance Committee that addressses progress towards goal attainment and problem solution.

APPENDIX A

DEFINITION OF TERMS

DEFINITION OF TERMS

Quality Assurance/Risk Mangement

These terms are used synonymously in this study and mean control actions, including programs, management techniques, etc., that are aimed at providing a previously determined quality of product, service or treatment. The control actions can be either feedback or feedforward in nature.

Food Service--Food and Nutritional Service--Dietary

As used in this study, all are meant to refer to the division (or other organizational sub entity) of a hospital, nursing home, or other health care institution that provides food and nutritional care to in and out patients and/or personnel such as staff and guests.

Chief, Food Service

As used in this study, is meant to be any person who is responsible for the supervision of a Food Service. No specific qualifications, such as Registered Dietitian, are implied, even though a specific Chief of Food Service may possess them.

Administrator/Chief/Executive Officer/Hospital Commander

Used synonymously in this study and meant to be the individual who is in charge and responsible for the administrative functions of any health care institution.

Provider

Any individual who is involved in direct patient care to include physicians, registered nurses, licensed practical nurses (and their military equivalents), physical therapists, occupational therapists, etc.

Nutritional Counseling/Dietary Treatment

For the purpose of this study these terms are used synonymously and mean counseling and/or dietary regiment that a Registered Dietitian may prescribe or provide in response to a prescription written by another practitioner.

Problems/Problem Areas/Potential Problem Areas

These terms are used synonymously to indicate specific problems and/or areas which may have problems. For the purpose of this study the potential problem or complexity of the problems or problem area is immaterial. The importance to this study is only identification of factors that may effect quality and the analysis of the problem.

APPENDIX B

"FOOD AND NUTRITION SELF ASSESSMENT SURVEY"

AND

SUMMARY OF RESULTS

FOOD AND NUTRITIONAL SERVICES SELF-ASSESSMENT SURVEY

	HOSP A	HOSP B	HOSP C	HOSP D	HOSP E	HOSP F	HOSP G
I. THE MISSION:							
1. Missions Identified							
Formal	yes	yes	yes	yes	yes	yes	yes
Informal	yes	yes	yes	yes	yes	yes	yes
2. Patient/Customer Satisfaction							
Inpatient	13.78	9.60	8.75	9.67	10.81	10.92	8.90
Treatment-Patient	14.13	13.72	11.91	12.38	12.15	12.11	13.60
Cafeteria Customer	9.01	9.47	10.85	11.16	11.63	11.00	8.83
3. Complaint/Suggestion Action File	yes	no	yes	yes	no	no	yes
II. PLANNING:							
1. Objective Identifed(or calendar year)	yes	yes	no	yes	yes	yes	Unknown
STATUS Current	yes	yes	no	yes	yes	yes	Unknown
2. Capital Equipment Program							
a. STATUS Current	yes	yes	yes	yes	yes	yes	yes
b. Dollar value per avg. monthly ration	1.71	14.20	11.25	13.50	11.00	Construc-tion	Construc-tion
3. Minor Equipment Program							
a. STATUS Current	yes	yes	yes	yes	yes	yes	yes
b. Dollar value per any monthly ration	2.71	3.77	1.30	3.50	1.50	Construc-tion	Construc-tion
4. Plan for Renovation or New Construction	yes	yes	yes	yes	yes	yes	yes
STATUS Current	yes	yes	yes	yes	yes	yes	yes

Areas that appear to deviate from the norm are indicated by [ ]. The reason for the apparent deviation has not been investigated. Thus, implications should not be drawn that there is in fact something wrong.

FOOD AND NUTRITIONAL SERVICES SELF-ASSESSMENT SURVEY

	HOSP A	HOSP B	HOSP C	HOSP D	HOSP E	HOSP F	HOSP G
5. Maintenance & Repair							
a. Log of written & telephone request	yes	yes	yes	yes	yes	yes	yes
b. STATUS Current	yes	yes	yes	yes	yes	yes	yes
c. Safety items indicated	yes	yes	no	yes	yes	yes	no
d. Qtr review by XO	yes	yes	no	yes	no	no	no
6. Number of Work Orders over							
a. 30 days old	0	0	1	6	0	0	0
b. 60 days old	0	2	0	3	0	2	0
c. 90 days old	1	12	0	2	0	1	0
III. ADMINISTRATION:							
1. Safety							
a. Monthly Inspections	yes	no	no	yes	yes	yes	no
b. Accidents reported & documented	yes	yes	yes	yes	yes	yes	no
c. Corrective Actions taken (a&b)	yes	yes	no	yes	yes	yes	no
d. Reportable Accidents:							
MONTH							
FY							
2. Sanitation (evaluation based on data)							
a. Inspections conducted IAW AR 40-5	sat	sat	ques(?)	sat	sat	sat	sat
# Satisfactory - MONTH							
FY							
# Unsatisfactory-MONTH							
FY							
(3) Deficiencies uncorrected							
b. Corrective Action Taken	yes	yes	ques(?)	yes	yes	yes	yes
3. Costs:							
a. Food Cost vs Authorized Expenditures (within regulatory limits)	yes	yes	yes	ques(?)	yes	yes	yes

FOOD AND NUTRITIONAL SERVICES SELF-ASSESSMENT SURVEY

		HOSP A	HOSP B	HOSP C	HOSP D	HOSP E	HOSP F	HOSP G
b. WORK HOURS Per Ration								
c. Labor cost Rer Ration FY		1.27	.87	.99	.85	.90	.96	1.3
d. Supply Cost Per Ration FY		.42	.42	.70	.52	.31	.42	.41
e. Total Cost Per Ration FY		18.90	14.30	14.97	15.60	15.89	14.20	20.97
4. Security and Accountability ---								
a. Security Plan Inspection Deficiencies (Latest Inspection) Deficiencies uncorrected (latest inspection) Total Deficiencies Uncorrected	Overall Program	sat	sat	ques(?)	sat	sat	sat	sat
b. Subsistence & Supply Control (1) Annual inspection conducted (2) Procedures IAW DA & local procedures (3) Deficiencies uncorrected-	Evaluation	sat	sat	ques(?)	sat	sat	sat	sat
5. Food Service								
a. Nourishment-Tray delivery & timeliness documented		no	yes	yes	yes	yes	yes	yes
b. Tray Accuracy Monitored		no	yes	no	yes	yes	yes	yes
c. Average Tray Accuracy Determined		no	yes	yes	yes	no	yes	yes

FOOD AND NUTRITIONAL SERVICES SELF-ASSESSMENT SURVEY

	HOSP A	HOSP B	HOSP C	HOSP D	HOSP E	HOSP F	HOSP G
d. A system is in use to insure proper reimbursement from patrons in the cafeteria and a check is made monthly to determine the accuracy of system.	yes	yes	no	yes	yes	yes	yes
IV. PERSONNEL MANAGEMENT:							
1. Turnover: (Civilian) FY to Date %	0	12.1%	10.2%	5%	4%	20.7%	
2. Training (Non-professional): a. A training program exists which complies with JCAH and military requirements, including an orientation for new employees and training is documented	yes	yes	yes	yes	yes	yes	yes
b. % Schedule who received scheduled training FY to Date	88%	46.2%	not documented	65%	not reported	93%	74.2%
c. Percent of new employees who received orientation	--	0	100%	100%	100%	100%	40%
3. Training (Professional): Total professional staff Number participating Description of professional training	appear to be adequate	appear to be adequate	appear to be adequate	appear to be adequate	appear to be adequate	appear to be adequate	appear to be adequate
4. Perscnnel:	ALL	FACILITIES	APPEAR	TO	BE	ADEQUATELY	STAFFED

FOOD AND NUTRITIONAL SERVICES SELF-ASSESSMENT SURVEY

	HOSP A	HOSP B	HOSP C	HOSP D	HOSP E	HOSP F	HOSP G
5. Availability for duty (military & civilians)							
a. Average hours sick leave FY	5.3	7.6	1.71	11	8.68	6.3	11.2
b. Average hours emerg leave FY	0	2.1	16.2	16	1.78	1.6	4.5
c. Average hours AWOL FY	0	unknown	.042	0	.13	0	0
6. Awards: FY	0	12	4	6	10	3	4
V. CLINICAL NUTRITION:							
1. Patient contact % of New Patients							
Patients seen by food service representative within: 24 Hours	100%	unknown	unknown	100%	55%	15%	85%
48 hours	---	unknown	unknown	---	75%	not reported	90%
Contact documented in patient's chart (%)	not done	not done	not done	not done	not done	not done	not done
2. Treatment Accuracy: Average census							
Number of records audited: FY	10	143	0	325	15	25	0
3. Staff satisfaction: Food Service	8.43	9.20	10.00	9.87	10.25	9.35	not done
Nutrition	12.10	10.30	10.20	10.10	10.25	9.25	not done
4. Outpatient nutritional counseling:							
a. # of individual patients seen: FY	111	405	349	533	831	1521	211
Avg. length of time of individual treatment							
Monthly FY to I	20 min	45 min	30 min	45 min	23 min	17 min	30 min
b. Number of groups seen: FY	72	13	19	25	88	135	94

APPENDIX C

FOOD AND NUTRITIONAL SERVICE

SELF ASSESSMENT SURVEY

COMPLETION INSTRUCTIONS

FOOD AND NUTRITIONAL SERVICE SELF-ASSESSMENT SURVEY

COMPLETION INSTRUCTIONS

13 October 1981

INTRODUCTION

The purpose of this study is to determine if certain measurable indicators are related to the quality of food service and dietary or nutritional care in US Army Medical Treatment Facilities (MTF)

In the spring of 1981 a study was conducted by Major Hancock to try to identify quantative indicators of food service and nutritional care quality. MTF administrators and Chiefs of Food Services in all military MTF's (Army, Navy, and Air Force) were surveyed as to what they felt were measurable indicators of food service and nutrition care quality. From the responses to this survey, a Food and Nutritional Service Self-Assessment Survey for Army Hospital Food Services and Nutrition Clinics was developed. The study that you have been asked to participate in is intended to test the validity of this Quality Assurance Self-Assessment Survey (Self-Audit).

The first major consideration of the study is to determine the dependent variable: quality. As it is obvious, this is a fairly difficult task. Thus, for the purpose of this study, the quality of food service and nutritional care is to be measured by the following indicators:

a. Patient satisfaction or opinion (both with food and treatment).

b. Customer Opinion- cafeteria customers.

c. Provider Opinion-satisfaction with food and nutrition care provided to patients.

d. Compliance with JCAH Standards and Army Regulations

Seven Army Hospitals (MAMC, BAMC, Ft Crd, Ft Leonard Wood, Ft Hood and Ft Leavenworth and Fort Polk) will be participating in the study. The Self-Assessment Survey is to be completed monthly in accordance with the following instructions. Since this self-assessment audit is in a test format and the purpose of the test is to determine if there is a relationship between the various indicators and quality, an assumption should not be made that non-compliance. (a no answer) to any particular indicator, cost, expenditure, etc is good or bad. Existing methods of operation should <u>not</u> be altered to "comply" with the survey unless the Chief of Food Service believes that the change will be of benefit. Honesty in completing the survey is essential for the success of this test. There are no right or wrong answers.

As you will notice there is a space on the survey form for your comments. It is expected that a major portion of the information derived from this study will come from your comments and suggestions. On the survey form please put only comments that qualify or explain your answer to a particular question or figure. For example, an explanation of a high equipment expenditure, a high turnover of civilian employees, etc. If you have comments on the question itself, its relevancy, phraseology, etc or suggestions, please put these on the back of the survey form. Also, please put on the back of the form any difficulty you had in obtaining the information required or suggestions on how information can better be maintained, obtained, etc.

If you have any questions or comments, please feel free to call or write me at the following address:

MAJ Dexter V. Hancock
Box 92
HQ, USAMEDDAC
FT POLK, LA 71459
Telephone # Autovon- 863-2272 or 2373

Also, please send your completed surveys to the above address. It will be greatly appreciated if you will forward the surveys NLT the 15th of each month.

The following instructions are to be used in completing the "Food & Nutritional Service Self-Assessment Survey. Since this is a test, it is essential that each facility be answering the "same questions." Therefore, if you have any questions concerning the instructions please call me before you complete the survey.

SURVEY COMPLETION INSTRUCTIONS

I. THE MISSION

1. Missions identified	Yes	No
Formal	___	___
Informal	___	___

Are both the formal and informal missions identified in writing and known to all personnel in the Food Service Division? The formal mission is contained in AR 40-2, HSC Reg 10-1 and local MTF Reg 10-1.

The informal mission varies from facility to facility, but may include things such as meeting the needs of the professional staff, providing support for community functions, providing special meals for enlisted personnel, etc. The informal mission is often the "periphery" of the formal mission and its completion is often necessary for other elements of the hospital to complete their formal mission. Obviously, the informal mission is difficult to define, but it must be considered. The informal mission will probably be delineated in internal food service documents such as SOP's.

2. Patient/Customer Satisfaction	Excellent	Good	Fair	Poor
Inpatient	_____	___	___	___
Treatment Outpatient	_____	___	___	___
Cafeteria Customer	_____	___	___	___

The information to complete this question is derived from the three surveys that have been supplied. The surveys should be completed monthly. The results of the second to the last question on each survey is to be used to complete this question. Calculations should be done as follows: Divide the number in each category (excellent, good, fair, poor) by the total number of completed questionnaires, i.e.

$$50 \text{ (excellent } \frac{\cdot}{\cdot} \text{ 150 survey complete} = 33\%$$

The number of surveys collected per month should be:

a. Inpatient- The average tray count. If the average tray count is 150, then 150 surveys should be completed by inpatients each month. One way to do this is tc divide the number of wards by four (weeks) and then have the diet aides and/or technicians survey 1/4 of the patients each week.

b. Treatment Outpatient- Each new outpatient should be given a survey at the end of the appointment and asked to complete it (this includes groups). Do not survey follow-up patients unless you want to for your own information. If you do survey follow-up patients, please keep their responses separate from the initial patients.

c. Cafeteria Customers- 60% of your average daily dining hall census (meals). For example, if you feed 300 people for breakfast, lunch, and dinner, then try and get 180 completed surveys. Surveys should be representative of all three meals.

3. Complaint/Suggestion File	Yes	No
	___	___

Are all complaints and suggestions (not the Army suggestion program, but customer suggestions) such as IG complaints from patients, etc. filed and is there a notation as to corrective action taken. (Handwritten notations are acceptable)

II PLANNING

	Yes	No
1. Objectives Identified FY Status Current	____ ____	____ ____

This question asks if there is an MBO or similar program for food service. This may be part of a formal MTF MBO program or may be a written plan of goals for the Food Service Division. Goals may be numerous and may include such diverse topics as decreasing employee sick leave to a certain level to implementing a salad bar. Current status means the progress toward the goals are being measured and status is known to those involved. It does not necessarily mean that the goal is being or has been met. For example, if one of your goals or objectives is to submit a plan for renovation of the dining facility, has a notation been made at least quarterly of what the status of this project is i.e., drawings complete; submitted to LOG; submitted to DAFE; etc.

2. Capital Equipment Program-

The Capital Equipment Program is the MEDCASE Program (equipment items over $3,000). A yes answer to this question means that the Food Service Division has items listed on the MTF MEDCASE Program.

a. Status Current - This question asks if the Food Service Division maintains information on the status of each piece of equipment submitted for inclusion in the program. For example, the status of a given piece of equipment might be listed in the following sequence: 1. Justification submitted to LOG. 2. Submitted to HSC. 3. 1A approval obtained. 4. Item funded. 5. PR submitted. 6. PR at P&C. 7. Contract let. 8. Equipment received.

b. Dollar value per average monthly ration. Divide the average monthly rations for the past year by the total estimated dollar value (cost) of all Food Service items listed on the MEDCASE Program, i.e.

$200,000 (value of Food Service items listed on MEDCASE that are unfunded) ÷ 10,000 (average monthly rations past FY) = $20

3. Minor Equipment Program- This should be completed in the same manner as for the MEDCASE program above except answers should be for the equipment program for items costing $1,000-$3,000.

4. Plan for Renovation or New Construction- Does a plan exist for renovation or replacement of the existing Food Service faculities?

Status Current- As with the equipment programs, is the status of any project known by the Chief of Food Service, i.e. 1. submitted to LOG. 2. Approved by CO. 3. Design funded. 4. Submitted to DAFE for design. 5. Design complete. 6. etc.

5. Maintenanne and Repair.

a. Is an accurate log maintained of all requests for maintenance and repair, both written and telephonic. This log should include an engineer, WO#, date of

request, and description of work requested.

b. Status Current - Is the status of each request current, i.e., funded, awaiting parts, etc.

c. Are all items that are safety related indicated. Also, in the status of safety related items is the date that the XO, CO and/or safety committee was notified of the work order indicated, if such notification is appropriate.

d. Has the XO reviewed all maintenance requests and their status if a satisfactory response has not been received? An acceptable method of accomplishing this would be to send a DF with a list of unaccomplished work orders to the XO on a quarterly basis (or more often if deemed necessary) and requesting assistance. If engineer support is not a problem, please make a comment to that effect.

6. Number of requests:

Over 30 days:
Over 60 days:
Over 90 days:

This is the number of incomplete work orders whose initial submission date is over 30, 60, or 90 days past. Do not omit any incomplete work orders regardless of the reason for their non-completion.

III ADMINISTRATION

1. Safety:

a. Monthly Inspection- Has a safety inspection been conducted during the month and has it been documented. Documentation would most likely be a report of the inspection to the Chief of Food Service.

b. Accidents reported and documented- Have all accidents been reported and have required reports been submitted? A file of Food Service accident reports should be maintained within the Food Service Division.

c. Corrective Action Taken (A&B)

Has action been taken to correct deficiencies on the monthly inspection (a) and has action been taken to prevent a further occurrence of reported accidents? Corrective actions should be documented, or if no action is appropriate, this should be noted.

d. Reportable accidents.

Month- all accidents that were reported IAW Army/or local procedures
FY- cumulative reportable accidents for the current fiscal year

2. Sanitation:

a. Inspections conducted IAW AR 40-5. Has the local Preventive Medicine actively conducted at lease one inspection of the Food Service Facility during the month?

#Satisfactory Month_____FY_____
#Unsatisfactory Month_____FY_____

This requests the number of satisfactory and unsatisfactory inspection reports for the month and the cumulative satisfactory and unsatisfactory reports for the FY.

b. Corrective Action Taken- Has corrective action been taken on inspection deficiencies and has the action been documented? Making a notation on the report is sufficient documentation of corrective action.

3. Costs:

a. Food cost versus authorized expenditures- This is the same information that is requested by Food Activities Report, HSC Form 114, line B(4)(5)(6)(7)(8)(9)

b. Work hours per ration- This is the total number of hours worked by civilian and military assigned or on loan to the Food Service Division. Officers and volunteers should be included. (For BAMC, Education & Training steff and interns should not be included) The total number of hours worked should then be divided by the number of rations served.

c. Labor Cost Per Ration- Month- The hours worked should be multiplied by the average employee cost per grade (EM, Off, & civilian) which should be available from Resource Management. Resource Management most likely computes the total Food Service monthly labor cost. After the total labor cost has been calculated, it should be divided by the total number of rations served for the month.

FY- total labor costs for the current fiscal year are divided by total rations served for the FY to Date.

d. Supply Cost- This is the cost of supplies (OMA) up to $1000. Dietary supplements should not be included in these figures. The authorized amount is that budgeted. The actual is that for which orders have been submitted. The difference is that amount spent over or under the budgeted amount.

e. Total Cost Per Ration-

MONTH_____
FY_____

This is the total cost per ration which includes food, labor, supplies, etc. This figure should presently be calculated by Resource Management.

4. Security and Accountability:

a. Security Plan Inspection- Has the fiscal security of the facility been inspected by an outside agency, i.e., MP's Internal Review, IG, etc. (it is recognized that this is usually an annual or biannual inspection, so please note in the comment section the date of the last inspection)

Deficiencies- please indicate the number of deficiencies in the most recent inspection.
Deficiencies uncorrected- Please note the number of deficiencies on the most recent inspection that have not been corrected.
Total deficiencies uncorrected- This is the number of deficiencies from all previous inspections that have not been corrected. If this information is not available, please note in the comment section.

b. Subsistence & Supply Control-

(1) Annual inspection conducted- This inspection is normally part of either an internal review and/or an IG inspection. Please indicate in the comment section which type of an inspection you are indicating and its date.

(2) Procedures IAW DA & Local Procedures- Did the Inspector's find your procedures substantially in compliance with DA Reg and your own local SOP's?

(3) Deficiencies uncorrected- How many deficiencies that were noted remain uncorrected?

5. Food Service:

a. Nourishment Tray delivery timeliness documented- Is a system in effect that verifies that a tray or nourishment was delivered to the Ward and the

time it was delivered. For example; do nursing service personnel sign the cart loading guide or a copy of the nourishment roster that the trays and/or nourishments were received and the time of receipt?

b. Tray Accuracy Monitored- Are trays checked for accuracy on the Ward on a random basis?

c. Average Tray Accuracy Determined-Is an average error rate determined as a result of the monitoring system? If so, what was the error rate for the past month. (The results of this monitoring activity should be documented.)

d. Is a system in use to insure proper reimbursement from patrons in the cafeteria and is a check made monthly to determine the accuracy? This question is self-explanatory except that, the concern is not who is fed, but that whoever eats pays the appropriate rate, i.e. Are EM on separate rations obtaining free meals? Are officers on TDY paying the per diem rate? etc.

IV PERSONNEL MANAGEMENT

1. Turnover (civilian)
Monthly% FY to Date%_____

To determine the civilian personnel turnover, divide the number of civilian personnel who leave(quit,fired, etc) during the month by the total number of civilian employees authorized (include approved "permanent" overhire positions). All civilians employed should be included in the calculations regardless of grade, job, etc. Compute the turnover rate for the FY by dividing the total number of employees who have left for the FY by the number of employees authorized. If authorizations change during the period, use the new figure. Indicate in the comment section that a change has occurred.

2. Training (Non-Professional)

a. A training program - JCAH requires that certain subjects be taught on an annual basis to all employees. This question asks if a program has been established, in writing to meet JCAH and pertinent DA requirements. The requirements addressed are only those the Food Service would be responsible for such as sanitation, food handling technique, etc. Documentation should include a schedule and a record of attendance for each employee (civilian & military).

b. %Scheduled who received training - Month_____FY_____. These figures are determined by dividing the number who attended training for the month (for which documentation exists) by the total number scheduled for training for the month. (an individual most likely will be counted more than once) For FY to Date- divide the number who have attended training by the total number scheduled for training for the FY year to date (an individual probably will be counted more than once in this figure also).

c. Number of new employees: Month_____FY to date_____. Number who received orientation_____. The number of new employees is the number who have reported for duty. The number who received orientation are those who received both an orientation by CPO and by Food Service and whose orientation has been documented on their training record.

3. Training (Professional)

Total professional staff_____.
Number Participating_____.
Description of professional training_____.

Professional staff are considered to be Dietetians (RD) and Diet Technicians. Please indicate in the comment section if diet technicians are included in the professional staff number. Number participating is the number who participated in some type of professional training activity. The description of professional training should be a short summary of professional training activities that the staff participated in. Examples are Conferences, Journal Clubs, Rounds, etc.

4. Personnel- Self-explanatory.

5. Available for duty (military & civilian):

a. Average hours sick leave: Total the number of hours sick leave taken by civilians and military and divide by the total number of personnel assigned. Count military as 8 hours sick leave per scheduled duty day missed.

b. Average hours emergency leave: Total the number of hours emergency leave taken by civilians and military. Emergency leave for civilians is "call in" annual leave that was not previously scheduled. Emergency leave for military is that authorized as emergency leave and/or extra days off given EM to deal with "emergencies." Do not count compensatory time or changed days off. Military emergency leave should be counted as 8 hours per scheduled duty day. Divide the total hours of emergency leave by the number of assigned military and civilian personnel.

6. Awards: Month_____FY to Date_____

Awards are all civilian and military awards that have been approved. Count awards for personnel who may have departed if they have been approved. Count any favorable personnel action that is considered an award under DA, HSC or local guidance. The local awards coordinator should be able to provide guidance if there is a question on whether an action is an award or strictly a personnel action.

V CLINICAL NUTRITION

1. Patient contact- Percent of patients seen by food service representative within 24 hours_____38 hours_____. Divide the total number of new patients per 24 or 48 hour period by the number who have been seen by a representative of Food Service. A representative is a diet aide, diet technician or dietitian. PTS personnel do not count. Leaving a select menu but not talking to the patient does not count. The representative must talk with the patient. Contact documented in patient's chart: Yes_____No_____. Are contacts documented? The only chart entry required is date of visit, thus aides or technicians might enter something to the effect "diet order received, patient interviewed." Obviously any chart entry by a dietitian would be counted. Percent of charts with documentation:_____. If a program is in existence to document patient contact, then a random audit of records should be done to determine what percent do not contain documentation of contact.

2. Treatment accuracy.

Average census_____. Number of records audited: Month_____ FY to Date_____. The average census is the average number of patients for the month being reported. The number of records audited or those records audited IAW local procedures for dietitian entries. The audit need not be conducted by the Food Service necessarily, i.e., a hospital committee may conduct the audit, but they must be audited for care and treatment provided by a dietitian or diet technician to be counted.

3. Staff satisfaction (quarterly questionnaire).

This questionnaire with instructions will be provided at a later date.

4. Outpatient nutritional counseling:

a. Number of individual patients seen.

b. Number of groups seen.

All information requested is self-explanatory and is reported on the HSC Food Services Activities Report except average length of individual treatment time. To obtain average treatment time, have each clinician enter on the appointement list the time spent with the patient. Total this time and then divide by the number of patients seen. Do not average group contact in this figure.

APPENDIX D

"DIETETIC SERVICES" SECTION OF THE PROGRAM ON HOSPITAL ACCREDITATION STANDARDS (PHAS) MANUAL[1]

Program on
Hospital
Accreditation
Standards

DIETETIC SERVICES

Joint Commission
on Accreditation of Hospitals

DS/1

DIETETIC SERVICES

CRITERIA	SOURCES
EFFECTIVELY ORGANIZED	*PRINCIPLE:* Dietetic services shall meet the nutritional needs of patients. *STANDARD I:* The dietetic department/service shall be organized, directed and staffed, and integrated with other units and departments of the hospital in a manner designed to assure the provision of optimal nutritional care and quality foodservice. *INTERPRETATION I:* The relationship of the dietetic department/service to other units and departments of the hospital shall be either: •specified within the overall hospital organizational plan *OR* •described in writing elsewhere
•Relationships specified	
•Scope defined	There shall be a written definition of the scope of the dietetic services provided to: •inpatients •ambulatory care patients, as appropriate •patients in a hospital-administered home care program, as appropriate
•Outside contract	*INTERPRETATION I:* When dietetic services are provided by an outside food management company: •the company shall comply with all applicable requirements of the *Accreditation Manual for Hospitals* •the contract shall specify the compliance requirements
DIRECTED BY A QUALIFIED PERSON	*INTERPRETATION I:* The dietetic department/service shall be directed on a full-time basis by an individual who: •is knowledgeable in foodservice management by: •education *OR* •specialized training and experience •shall be responsible to the chief executive officer or his designee •shall have the authority and responsibility for assuring that: •established policies are carried out •overall coordination and integration of the therapeutic and administrative dietetic services are maintained •a review and evaluation of the quality, safety, and appropriateness of the dietetic department/service functions is performed

DIETETIC SERVICES

SELF-ASSESSMENT ITEMS	Y	N	NA	NOTES/COMMENTS
If dietetic services are supplied by an outside food managemnt provider, is it required that the provider comply with the requirements of the *Accreditation Manual for Hospitals?*	Y	N		
Is the dietetic department/ service directed: • by a full-time individual?	Y	N		
• who is knowledgeable in foodservice management?	Y	N		

DIETETIC SERVICES

CRITERIA	SOURCES
STAFFED BY A SUFFICIENT NUMBER OF QUALIFIED PERSONNEL	*INTERPRETATION I:* Dietetic services shall be provided by a sufficient number of qualified personnel under competent supervision. The nutritional aspects of patient care shall be supervised by a qualified dietetic who:
•Qualifications	•is registered by the Commission on Dietetic Registration of the American Dietetic Association *OR* •has the documented equivalent in: •education, including relevant continuing education •training •experience •shall assure that the provision of high-quality nutritional care to patients is maintained
•Responsibilities	*INTERPRETATION I:* When the services of a qualified dietitian are used on a part-time basis, this individual shall: •provide such services on the premises on a regularly scheduled basis •commit sufficient on-site time to the services to provide at least the following: •continuing liaison with the administration, medical staff, and nursing staff •patient/family counseling as needed •approval of menus, including modified diets •any required nutritional assessments •participation in the development of policies and procedures •participation in continuing education programs •evaluation of dietetic services provided *NOTE: When a qualified dietitian serves only in consultant status, this individual shall submit written reports regularly to the chief executive officer concerning the extent of services provided.*
APPROPRIATE TRAINING AND EDUCATION PROGRAMS PROVIDED	*STANDARD II:* Personnel shall be prepared for their responsibilities in the provision of dietetic services through appropriate training and education programs.

DIETETIC SERVICES

SELF-ASSESSMENT ITEMS	Y	N	NA	NOTES/COMMENTS
Are the nutritional aspects of patient care supervised by a qualified dietitian?	Y	N		
Is there sufficient staff to perform the duties and responsibilities of the dietetic department/service?	Y	N		
Is there evidence that a qualified dietitian:				
•provides liaison with the medical staff, nursing staff, and administration?	Y	N		
•provides patient/family counseling as needed?	Y	N		
•approves menus, including modified diets?	Y	N		
•performs all required nutritional assessments?	Y	N		
•participates in the development of policies and procedures of the dietetic department/service?	Y	N		
•participates in continuing education programs?	Y	N		
•participates in the evaluation of the dietetic services provided?	Y	N		

DIETETIC SERVICES

CRITERIA	SOURCES
APPROPRIATE TRAINING AND EDUCATION PROGRAMS PROVIDED (continued)	*INTERPRETATION II:* Education, training, and experience of personnel who provide dietetic services shall be: •documented •related to each individual's level of participation in the provision of dietetic services *NOTE: A formal training program may be required as a prerequisite.*
•Orientation	*INTERPRETATION II:* New personnel shall: •receive an orientation of sufficient duration and substance prior to providing dietetic services without direct supervision •have such orientation documented •as appropriate to their level of responsibility, receive instruction and demonstrate competence in: •personal hygiene and infection control •proper inspection, handling, preparation, serving, and storing of food •proper cleaning and safe operation of equipment •general foodservice sanitation and safety •proper method of waste disposal •portion control •writing of modified diets using the diet manual/handbook •diet instruction •recording of pertinent dietetic information in the patient's medical record
•Relevant in-service programs	*INTERPRETATION II:* Personnel providing dietetic services shall participate in relevant in-service education programs that shall: •be provided for personnel from all work shifts •be planned and conducted for dietetic personnel and, as appropriate, for other hospital personnel with the participation of: •the director of the dietetic department/ service *OR* •the director's qualified designees •include safety and infection control requirements

DIETETIC SERVICES

SELF-ASSESSMENT ITEMS	Y	N	NA	NOTES/COMMENTS
Do educational and training programs for personnel of the dietetic department/service include:				
•orientation for new employees?	Y	N		
•personal hygiene instruction?	Y	N		
Do educational and training programs for personnel of the dietetic department/service include:				
•relevant in-service education?	Y	N		
•infection control requirements?	Y	N		
•safety requirements?	Y	N		

DIETETIC SERVICES

CRITERIA	SOURCES
• External programs	*INTERPRETATION II:* Outside educational opportunities shall be provided as feasible, at least for supervisory dietetic personnel. The extent of participation of dietetic personnel in continuing education shall be documented. Education programs for dietetic services personnel shall be: •realistically related to the: •size of the staff •scope and complexity of the dietetic services provided •based at least in part on the results of dietetic department/service evaluation studies
•Training programs	*INTERPRETATION II:* The training of dietetic students and dietetic interns shall be carried out only in programs accredited by the appropriate professional educational organization. Individuals in student status shall be directly supervised by a qualified dietitian when engaged in patient care activities. *NOTE: When the hospital provides clinical facilities for the education and training of dietetic students from an outside program, the respective roles and responsibilities of the dietetic department/service and the outside educational program shall be defined in writing.*
SPACE, EQUIPMENT, AND SUPPLIES PROVIDED	*STANDARD IV:* The dietetic department/service shall be designed and equipped to facilitate the safe, sanitary, and timely provision of foodservice to meet the nutritional needs of patients. *INTERPRETATION IV:* Sufficient space and equipment shall be provided to: •store food separately from nonfood supplies •prepare and distribute food, including modified diets •clean and sanitize utensils and dishes apart from food preparation areas •enable supportive personnel to perform their duties •assure availability to dietetic personnel of conveniently located current reference material •store food and nonfood supplies under sanitary, safe, and secure conditions •assure that dietetic department/service facilities and equipment are in compliance with federal, state, and local sanitation and safety laws and regulations

DIETETIC SERVICES

SELF-ASSESSMENT ITEMS	Y	N	NA	NOTES/COMMENTS
Do educational and training programs for personnel of the dietetic department/service reflect:				
•outside educational opportunities at least for supervisory personnel?	Y	N		
•the findings and recommendations from dietetic department/service evaluation studies?	Y	N		
Is the extent of participation of dietetic personnel in such educational and training activities documented?	Y	N		
If there are dietetic students or dietetic interns training in the facility:			NA	
•is the training program accredited by the appropriate professional educational organization (American Dietetic Association)?	Y	N		
•are the respective roles and responsibilities of the dietetic department/service and the outside educational program defined in writing?	Y	N		
Is food stored separately from nonfood supplies?	Y	N		When storage facilities are limited, paper products may be stored with food supplies.

DIETETIC SERVICES

CRITERIA	SOURCES
•Food handling precautions	*INTERPRETATION IV:* The following precautions shall be taken in the handling and preparation of food: •protection of food from contamination and spoilage •storage of foods at proper temperatures with the use of appropriate thermometers and maintenance of temperature records •control of lighting, ventilation, and humidity, in order to prevent both: •condensation of moisture •growth of molds •methods for making, storing, and dispensing ice that minimize the opportunity for contamination *NOTE: Ice, for example, should not be scooped by hand, nor should food items or scoops be stored directly on ice that is being stored for dispensing.* •separate cutting boards provided for meat, poultry, fish, and raw fruits and vegetables. Cooked foods should not be cut on the same boards used for raw food preparation *NOTE: Separate cutting boards may not be required when there are boards in use that are nonabsorbent and capable of being cleaned and sanitized adequately, and when the cleaning and sanitizing procedure is performed properly between usage for different food categories.* •thorough cleansing and sanitizing between periods of use of all working surfaces, particularly food contact surfaces, utensils, and equipment •convenient location throughout the department of adequate toilet, hand-washing, and hand-drying facilities •use of dish-washing and utensil-washing equipment and techniques that assure sanitized serviceware and prevent recontamination, including monitoring of proper temperature maintenance during cleaning cycles •discarding plasticware, china, and glassware that has lost its glaze or is chipped or cracked •discarding of disposable containers and utensils after one use •traffic control of unauthorized individuals through food preparation and service areas in order to decrease contamination potential and operational inefficiency

DIETETIC SERVICES

SELF-ASSESSMENT ITEMS	Y	N	NA	NOTES/COMMENTS
With reference to handling, preparation, and storage of food, is there evidence that:				
•food is protected from contamination and spoilage?	Y	N		
•foods are stored at proper temperatures?	Y	N		
•lighting, ventilation, and humidity are controlled?	Y	N		
•ice contamination opportunities are minimized?	Y	N		
•separate cutting boards are provided as necessary?	Y	N		
•there are cleansing and sanitizing of all working surfaces between periods of use?	Y	N		
•hand-washing facilities are adequate?	Y	N		
•dish-washing and utensil-washing equipment and techniques are adequate?	Y	N		
•cracked or chipped plasticware, china, and glassware are discarded?	Y	N		
•disposable containers and utensils are discarded after one use?	Y	N		
•traffic of unauthorized individuals is controlled?	Y	N		

DIETETIC SERVICES

CRITERIA	SOURCES
SAFETY PRECAUTIONS FOLLOWED	*INTERPRETATION IV:* Safety shall be assured by providing at least the following precautions: •the ability to open from the inside of all walk-in refrigerators and freezers on the premises, whether they are in use or not •insulation of or protection from hot and cold water pipes, water heaters, refrigerator compressors, condensing units, and heat-producing equipment •clear labeling of food and nonfood supplies •documentation review and action based on the findings of the hospital preventive and corrective maintenance and safety programs as these relate to the dietetic department/service •procurement of all food from sources where the food is processed under regulated quality and sanitation controls *NOTE: This precaution does not preclude the use of local produce.*
•Garbage disposal	*INTERPRETATION IV:* The holding, transferring and disposing of garbage shall be done in a manner that will: •prevent creation of: •a nuisance •a breeding place for insects, rodents, and vermin •not otherwise permit the transmission of the disease *INTERPRETATION IV:* Containers must be: •leakproof •nonabsorbant with close-fitting covers *NOTE: It is desirable that impervious liners be used.* *FUNCTIONAL SAFETY AND SANITATION INTERPRETATION II:* Exhaust hoods, grease removal devices, and ducts for commercial cooking ranges and deep fryers shall be equipped with approved automatic: •carbon dioxide *OR* •dry chemical extinguishing systems that shall also serve to protect the cooking surfaces. *NOTE: Portable extinguishers of the same type should also be available for use in case of fires.*

DIETETIC SERVICES

SELF-ASSESSMENT ITEMS	Y	N	NA	NOTES/COMMENTS
Do the safety precautions in use provide that:				
• walk-in refrigerators and freezers can be opened from the inside at all times?	Y	N	NA	This protection is to be found when such refrigerators and freezers are locked and whether or not they are in use.
• there is insulation of or protection from hot and cold water pipes, water heaters, refrigerator compressors, condensing units, and heat-producing equipment?	Y	N		
• food and nonfood supplies are clearly labeled?	Y	N		
• there is documentation of participation in the hospital preventive maintenance and safety programs?	Y	N		Such programs shall include inspection and testing of nonclinical electrical equipment at regular intervals to be determined by the chief of the engineering and maintenance department, including all appliances (FUNCTIONAL SAFETY AND SANITATION INTERPRETATION II).
Is the:				
• holding	Y	N		
• transferring	Y	N		
• disposing	Y	N		
of garbage done in a manner that will not create a nuisance or otherwise permit the transmission of disease?				

DIETETIC SERVICES

CRITERIA	SOURCES
POLICIES AND PROCEDURES WRITTEN	*STANDARD III:* Dietetic services shall be guided by written policies and procedures.
•Development	*INTERPRETATION III:* There shall be written policies and procedures concerning the scope and conduct of dietetic services, that: •include administrative policies and procedures: •concerning food procurement, preparation, and service •developed by the director of the dietetic department/service •include nutritional care policies and procedures: •developed by a qualified dietitian •that, when appropriate, should have the concurrence or approval of the medical staff through its designated mechanism, and of the nursing service
•Review and revision	•are: •subjected to timely review •revised as necessary •dated to indicate the time of the last review •enforced
•Contents	*INTERPRETATION III:* The policies and procedures shall relate to at least the following: •responsibilities and authority of: •the director of the dietetic department/ service •the qualified dietitian, when the director is not a qualified dietitian •food purchasing, storage, inventory, preparation, and service •diet orders, which should be recorded in the patient's medical record: •by an authorized individual •before the diet is served to the patient •proper use of and adherence to standards for nutritional care, as specified in the diet manual/ handbook •nutritional assessment and counseling, and diet instruction •menus •the role, as appropriate, of the dietetic department/service in the preparation, storage, distribution, and administration of: •enteric tube feedings •total parenteral nutrition programs •alterations in diets or diet schedules, including

DIETETIC SERVICES

SELF-ASSESSMENT ITEMS	Y N NA	NOTES/COMMENTS
Do the written dietetic department/ service policies and procedures relate to:		
• the responsibilities and authority of the director?	Y N	
• food storage and preparation?	Y N	
• diet orders?	Y N	
• diet instruction?	Y N	
• menus?	Y N	

DIETETIC SERVICES

CRITERIA	SOURCES
•Contents (continued)	provision of foodservice to persons not receiving the regular meal service •ancillary dietetic services, as appropriate, including: •food storage and kitchens on patient care units •formula supply •cafeterias •vending operations ice making •an identification system for patient trays, and methods used to assure that each patient receives the appropriate diet as ordered •personal hygiene and health of dietetic personnel •infection control measures to minimize the possibility of contamination and transfer of infection, to include establishment of: •a monitoring procedure to assure that dietetic personnel are free from infections and open skin lesions •sanitation procedures for the cleaning and maintenance of equipment and work areas, and the washing and storage of utensils and dishes •pertinent safety practices, including the control of the following hazards: •electrical •flammable •mechanical •as appropriate, radiation •compliance with applicable federal, state, and local laws and regulations
•Disaster plans	*INTERPRETATION III:* There shall be a clear definition of the role of the dietetic department/service in the hospital's: •internal disaster plan •external disaster plan *INTERPRETATION III:* The role of the dietetic department/service in the hospital's disaster plans shall provide for the following: •the department/service shall be able to meet the nutritional needs of patients and staff during a disaster, consistent with the capabilities of the hospital and community served •the hospital should be essentially self-sustaining for a minimum of one week, including provision of preestablished mechanisms for immediate supply of water, food, and fuel (FUNCTIONAL SAFETY AND SANITATION INTERPRETATION III)

DIETETIC SERVICES

SELF-ASSESSMENT ITEMS	Y	N	NA	NOTES/COMMENTS
Do the written dietetic department/ service policies and procedures relate to:				
•an identification system for patient trays?	Y	N		
•personal hygiene and health of dietetic personnel?	Y	N		
•infection control measures?	Y	N		
•safety practices?	Y	N		
Is the role of the dietetic department/service in the hospital's disaster plans clearly defined?	Y	N		

DIETETIC SERVICES

CRITERIA	SOURCES
•Diet Manual/Handbook	*INTERPRETATION III:* There shall be a diet manual/handbook that shall: •be developed or adopted by a qualified dietitian in cooperation with: •representatives of the medical staff •other appropriate dietetic staff •specify standards for nutritional care that are at least in accordance with those of the *Recommended Dietary Allowances (1974)* of the Food and Nutrition Board of the National Research Council of the National Academy of Sciences •specify the nutritional deficiencies of any diet that is not in compliance with the recommended dietary allowances •serve as a guide to ordering diets *NOTE: Menus served should be consistent with the requirements in the diet manual/handbook.* •be reviewed annually and revised as necessary by a qualified dietitian •be dated to identify the review and any revisions made •be approved by the medical staff through its designated mechanism *NOTE: A copy of the diet manual/handbook shall be located in each patient care unit.* *INTERPRETATION III:* All master menus and modified diets shall be approved by a qualified dietitian.
DOCUMENTED	*STANDARD V:* Dietetic services shall be provided to patients in accordance with a written order by the responsible practitioner, and appropriate dietetic information shall be recorded in the patient's medical record.
•Medical record entries	*INTERPRETATION V:* The qualified dietitian or authorized designee: •shall enter dietetic information into the medical record as specified, and in the location determined, by those performing the medical record review function *NOTE: These determinations shall be made by the medical record committee when one exists.* •is responsible for documenting appropriate nutritional information in the medical record on the request of the appropriate medical staff member

DIETETIC SERVICES

SELF-ASSESSMENT ITEMS	Y	N	NA	NOTES/COMMENTS
Is there a diet manual or handbook that:				
•is current?	Y	N		
•is adopted by a qualified dietitian?	Y	N		
•is approved by the medical staff?	Y	N		
•indicates the nutritional deficiencies of any diet?	Y	N		
•is reviewed annually?	Y	N		
•is located in each patient care unit?	Y	N		
Are all master menus and modified diets approved by a qualified dietitian?	Y	N		
Does the qualified dietitian or authorized designee document nutritional information as authorized in the patient's medical record?	Y	N		

DIETETIC SERVICES

CRITERIA	SOURCES
•Medical record entries (continued)	*INTERPRETATION V:* Such documentation may include: •confirmation of the diet order within 24 hours of admission for: •those patients receiving oral alimentation •all subsequent orders by the responsible practitioner for a diet modification •summary of the dietary history and/or nutrition assessment, when the past dietary pattern is known to have a bearing on the patient's condition or treatment •timely and periodic assessment of the patient's nutrient intake and tolerance to the prescribed diet modification, including the effect or the patient's appetite and food habits on food intake and any substitions made •description of the diet instructions given to the patient or family and assessment of their diet knowledge •description or copy of the diet information forwarded to another institution upon patient discharge *NOTE: If nutritional care follow-up reverts to the practitioner's office practice or a health care agency, this should be noted in the patient's record.*
•Consultant reports	*INTERPRETATION I:* When a qualified dietitian serves only in consultant status, this individual shall submit written reports regularly to the chief executive officer concerning the extent of services provided.
EVALUATED	*STANDARD VI:* The quality and appropriateness of nutritional care provided by the dietetic service shall be regularly reviewed and evaluated.
•Review and evaluation of appropriateness and effectiveness	*INTERPRETATION VI:* The director of the dietetic department/service, in consultation with a qualified dietitian when the director is not a qualified dietitian, shall be responsible for assuring that a review and evaluation of the appropriateness and effectiveness of such services: •is accomplished in a timely manner, including the nutritional care provided to: •inpatients •when applicable, ambulatory care patients •when applicable, patients in a hospital-administered home care program •is performed at least annually •involves the use of: •the medical record •preestablished criteria

DIETETIC SERVICES

SELF-ASSESSMENT ITEMS	Y N NA	NOTES/COMMENTS
Is a review and evaluation of the quality and appropriateness of dietetic services: • performed at least annually? • based on the use of preestablished criteria? • designed to include outside provider sources?	Y N Y N Y N NA	

DIETETIC SERVICES

CRITERIA	SOURCES
•Review and evaluation of appropriateness and effectiveness (continued)	•includes input from the medical, nursing and dietetic staffs •should be performed within the overall hospital quality assurance program •includes on the same regular basis a review and evalution of the quality and appropriateness of dietetic services provided to the hospital by outside sources
•Quality control mechanisms	*INTERPRETATION VI:* At least the following quality control mechanisms shall be implemented: •all menus are evaluated for nutritional adequacy •there is a means for identifying patients who are not receiving oral intake •tray identification is monitored •not more than 15 hours elapse between the serving of the evening meal and the next substantial meal for patients who: •are on oral intake •do not have specific dietary requirements •as appropriate, the nutrient intake of patients is assessed and recorded •as appropriate, patients with special dietary needs receive instructions relative to their diets, and an indication of the patient's (or family's) understanding of these instructions is recorded in the medical record •as appropriate, patients who are discharged from the hospital on modified diets receive written instructions and individualized counseling prior to their discharge •qualified dietitians participate in committee activities concerned with nutritional care •there is a maximum effort to assure the appetizing appearance, palatability, proper serving temperature, and retention of nutrient value of food *NOTE: Whenever possible, patient food preferences shall be respected and appropriate dietary substitutions made available. Surveys to determine patient acceptance of food are encouraged, particularly in the case of long-stay patients.*

DIETETIC SERVICES

SELF-ASSESSMENT ITEMS	Y	N	NA	NOTES/COMMENTS
				See also the Quality Assurance standard
Is the patient diet (tray) identification monitored at all times?	Y	N		
Is the interval between the evening meal and the next substantial meal 15 hours or less for patients who are on oral intake and do not have special dietary requirements?	Y	N		
Does a qualified dietitian participate in committee activities concerned with nutritional care?	Y	N		

FOOTNOTES

[1]Joint Commission on Accreditation of Hospitals, "Dietetic Services," Section of the Program or Hospital Accreditation Standards (PHAS) Manual, Seventh Edition (Chicago: Joint Commission on Accreditation of Hospitals, 1979), pp. DS 1-23.

APPENDIX E

DESCRIPTION OF TEST SITES

The following is a description of each test site hospital. To retain anonymity and because data collected indicated little relationship between hospital characteristic and results the descriptions are given by name and not by the hospital code used in the study.[1]

1. Brooke Army Medical Center (BAMC) is a 632 bed medical center located at Fort Sam Houston, Texas. Inpatient facilities are located in three different buildings. All medical specialties are represented at BAMC. The Food Service Division operates two cafeterias and two patient feeding systems. Approximately 3,000 meals per day are served to patients and staff with about 350 patient trays served at each meal. BAMC operates one of the two approved Army dietetic internship programs.

2. Madigan Army Medical Center (MAMC) is a 411 bed medical center offering most specialties. The center offers a number of residency programs. MAMC is located at Fort Lewis, Washington. The Food Service Division serves about 1,500 meals per day. About 750 of these meals are served to patients on the wards.

3. Silas B. Hays Army Community Hospital is located at Fort Ord, California. The hospital has 169 operating beds. A number of specialties are offered. The Food Service Division operates a cafeteria and a ward tray service for patients who are confined to the wards. Approximately 900 meals per day are served, with about 125 trays served to patients on the wards each meal.

4. Darnell Army Community Hospital is located at Fort Hood, Texas. It has 260 operating beds and offers a number of specialties. The Food Service Division operates a cafeteria for patients and staff and a patient tray service. Approximately 900 meals per day are served including about 125 patient trays per meal period.

5. Fort Leonard Wood Army Community Hospital is a 238 bed hospital located at Fort Leonard Wood, Missouri. The majority of patients seen are basic trainees with relatively minor injuries and diseases, although a number of specialties are offered. The Food Service Division operates a cafeteria and a patient tray system serving approximately 750 meals per day of which approximately 375 are patient trays per day.

6. Munson Army Community Hospital is located at Fort Leavenworth, Kansas, home of the Army Command and General Staff College and the Army Detention Facility. The hospital is a 46 bed hospital averaging about 34 occupied beds. The Food Service Division operates a small cafeteria for hospital staff and patients and a tray service for patients eating on the ward. The Food Service serves about 270 meals per day with about 75 patient trays served daily.

FOOTNOTES

[1]HQ, US Army Health Services Command, "Command Performance Summary, 1st Qtr, FY 82" (Fort Sam Houston, TX, 1982) pp. 34-35.

APPENDIX F

HSC TASKING LETTER

PATIENT SATISFACTION SURVEY DATE: _____

In an effort to maintain high standards of food and service, we would like to have your comments on several questions. Please circle your answers (or fill in the blank) and leave the form by your bedside to be picked up by the Health Aids. If we can be of assistance concerning your meals, please ask your nurse to call us.

1. Which ward are you located on? _____

2. How long have you been a patient?

   1-7 days 8-14 days 15-21 days 22-28 days over 29 days

3. Do you eat your meals in the dining room? YES NO

4. Please rate the following aspects of meal service.

   a. The temperature of the hot food items. *(Comment Below) EXCELLENT GOOD FAIR POOR

   b. The temperature of cold food items. *(Comment Below) EXCELLENT GOOD FAIR POOR

   c. Quality of food preparation. EXCELLENT GOOD FAIR POOR

   d. The appearance of your tray. EXCELLENT GOOD FAIR POOR

   e. The variety of foods offered. EXCELLENT GOOD FAIR POOR

   f. Do you receive your tray on time? ALWAYS USUALLY SELDOM NEVER

5. If you choosing from a selective menu, please rate the following:

   a. Is the menu easy to read? ALWAYS USUALLY SELDOM NEVER

   b. Do you receive what you order? ALWAYS USUALLY SELDOM NEVER

   c. Do you receive a menu? ALWAYS USUALLY SELDOM NEVER

6. If you are receiving a modified diet and cannot choose your own foods, please answer the following questions.

   a. What kind of modified diet are you receiving? _____

   b. How often have you been visited by someone from the Dietary Department to help you with dietary tolerances or problems?

      DAILY FREQUENTLY SELDOM NEVER

7. If you have been given a diet instruction, please answer the following:

   a. Please rate the presentation of the diet instruction. EXCELLENT GOOD FAIR POOR

   b. Please rate your understanding of the diet. EXCELLENT GOOD FAIR POOR

8. Please rate the overall quality of the food and service you have received.

   EXCELLENT GOOD FAIR POOR

9. Please make any comments: (If you have a specific problem you would like to discuss with dietary personnel, please write in your name and bed number so we can help you.)

MEDDAC Form 0016 (Test)
27 Aug 81 Ft Polk

APPENDIX G

QUESTIONNAIRE

SURVEY RESULTS BY TEST SITE

PATIENT TRAY SERVICE

TABLE 2

SATISFACTION WITH
PATIENT TRAY SERVICE

		EXCELLENT	GOOD	FAIR	POOR
Hospital A.					
Month 1		43%	50%	7%	0
2		52	57	1	0
3		63	18	18	1
4		66	16	17	1
5		68	18	14	0
	Average	58%	30%	11.5%	.05%
	x	15	x 10	x 5	x 0
	=	10.2	3.0	.58	
	Score	13.78			
Hospital B.					
Month 1		34.5%	42	4.2	0
2		45.6	42.1	10.5	0
3		23.4	45.5	19.5	5.2
4		28	37.8	10.5	3.5
	Average	33%	42%	11%	2%
	x	15	10	5	0
	=	4.95	4.20	.55	0
	Score	9.60			
Hospital C.					
Month 1		16%	37%	22%	10%
2		29	36	2	0
3		23	30	16	5
4		42	45	10	3
5		35	40	19	2
	Average	29%	37.6%	14%	4%
	x	15	10	5	0
	=	4.35	3.76	.70	0
	Score	8.75			
Hospital D.					
Month 1		30%	50%	17%	3%
2		35	53	10	3
3		30	49	19	2
4		31	55	12	2
5		39	44	12	5
	Average	33%	50.2%	14%	3%
	x	15	10	5	0
	=	4.95	5.02	.70	0
	Score	4.67			

TABLE 2 (Continued)

Hospital E.					
Month 1		- %	- %	- %	- %
2		41	41	18	0
3		52.2	47.8	0	0
4		22.2	69.4	8.4	0
5		23	45	12	0
	Average	35%	50.8%	9.6%	0
	x	15	10	5	0
	=	5.25	5.08	.48	
	Score	10.81			
Hospital F.					
Month 1		34%	42%	24%	0
2		35	47.5	11	6
3		50	35	12	3
4		34	58	6	2
5		35	45	20	0
	Average	37.6%	45.5%	14.6%	3%
	x	15	x 10	x 5	x 0
	=	5.64	4.55	.73	
	Score	10.92			
Hospital G.					
Month 1		24	46	18	3
2		15	40	10	0
3					
4					
5		30	60	5	0
	Average	.23	.49	.11	.01
	x	15	15	5	0
	=	3.45	4.9	8.9	
	Score	8.9			

APPENDIX H

QUESTIONNAIRE

SURVEY RESULTS BY TEST SITE

NUTRITION COUNSELING

PATIENT SATISFACTION SURVEY

DATE:_____

In an effort to maintain high standards of nutritional care and dietary treatment, we would appreciate if you would answer the following questions. We would also appreciate any additional comments you may have. Please circle your answers and place the completed survey in the box provided or return it by mail.

1. What is your status?

   Active Duty Dependent Retired Dependent of Retired Other

2. How many times have you been seen in the Nutrition Clinic?

   One (1) Two (2) Three or more

3. What type of diet or nutrition counseling did you receive (i.e. 1200 cal, sodium restricted, weight control etc)?

4. How long did you have to wait for your appointment?

   Less than 1 week Less than 2 weeks Less than 3 weeks

5. When you arrived for your appointment were you:

   Seen on time Waited less than 10 min Waited more than 10 min

6. Did your physician give you any information concerning your dietary treatment? Yes No

7. Do you feel you were given the treatment (information) that your physician intended? Yes No

8. Did you understand the information and/diet the dietitian gave you? Yes No

9. Do you feel the information and diet will help you? Yes No

10. Do you feel that your experience in the nutrition clinic was?

    Excellent Good Fair Poor

11. Please feel free to add any comments that you may have. If you have any questions about your treatment, please feel free to contact us at telephone .

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TABLE 3

SATISFACTION WITH NUTRITIONAL COUNSELING & TREATMENT

		EXCELLENT	GOOD	FAIR	POOR
Hospital A.					
Month 1		70%	30%	-	-
2		72	28	-	-
3		88	12	-	-
4		92	8	-	-
5		91	9	-	-
	Average	82.6%	17.4%		
	x	15	10		
	=	12.39	1.74		
	Score	14.13			
Hospital B.					
Month 1		50%	50%	0%	0%
2		60	35.6	3.3	0
3		72.7	37.2	0	0
4		100	0	0	0
5		-	-	-	-
	Average	70.7%	30.7%	.82%	
	x	15	10	5	
	=	10.61	3.07	.04	
	Score	13.72			
Hospital C.					
Month 1		35%	53%	12%	0%
2		36	57	7	0
3		70	30	0	0
4		48	48	4	0
5		34	57	9	0
	Average	44.6%	49%	6.4%	0%
	x	15	10	5	0
	=	6.69	4.90	.32	-
	Score	11.91			
Hospital D.					
Month 1		35%	50%	12%	3%
2		69	29	2	0
3		35	50	12	3
4		70	30	-	-
5		69	29	2	0
	Average	55.6%	37.6%	5.6%	1.2%
	x	15	10	5	0
	=	8.34	3.76	.28	0
	Score	12.38			

TABLE 3 (Continued)

Hospital E.					
Month 1		- %	- %	- %	- %
2		61	32	7	0
3		42	49	9	4
4		37	58	13	0
5		50	45	5	2
	Average	47.5%	46%	8.5%	2%
	x	15	10	5	0
	=	7.125	4.6	.425	0
	Score	12.15			
Hospital F.					
Month 1		39.5%	54%	5%	2%
2		52.7	38.4	8.9	0
3		59	34	6	0
4		45	49	4	0
5		61	34	4	0
	Average	51.41%	41.91%	5.61%	0%
	x	15	10	5	0
	=	7.72	4.20	.29	
	Score	12.21			
Hospital G.					
Month 1		63%	33%	4.0%	0%
2		70	30	-	0
3		-	-	-	0
4		72	33	-	0
5		84	17	-	0
	Average	72%	28%	1%	0
	x	15	10	5	0
	=	10.8	2.8	-	0
	Score	13.6			

DINING HALL PATRON SATISFACTION SURVEY DATE: _____

In an effort to maintain high standards of food and service, we would like to have your comments on several questions. Please circle your answers and leave this form in the box by the exit door. We will appreciate any comments you may have and if we can be of any assistance concerning your meals, please consult one of our staff members.

1. What is your status?

   Patient Civilian Staff Enlisted Officer Guest

2. How many meals do you eat in the Dining Hall?

   1/day 2/day 3/day 1-3/week first visit

3. How do you find out what is on the menu?

   on Wards entrance to Dining Hall Food Service Employees other

4. Please rate the following aspects of our Food Service:

a. The variety of foods on the menu.	EXCELLENT	GOOD	FAIR	POOR
b. The present meal hours.	EXCELLENT	GOOD	FAIR	POOR
c. The atmosphere of the Dining Facilities	EXCELLENT	GOOD	FAIR	POOR
d. Are the employees' appearances acceptable?	ALWAYS	USUALLY	SELDOM	NEVER
e. Are the employees courteous?	ALWAYS	USUALLY	SELDOM	NEVER
f. Are the food items displayed attractively?	ALWAYS	USUALLY	SELDOM	NEVER
g. Is the quality of the food acceptable?	ALWAYS	USUALLY	SELDOM	NEVER
h. Are your hot foods adequaely hot?	ALWAYS	USUALLY	SELDOM	NEVER
i. Are your cold foods adequately cold?	ALWAYS	USUALLY	SELDOM	NEVER
j. How often do you use the salad bar?	ALWAYS	USUALLY	SELDOM	NEVER
k. How often do you use the short order line?	ALWAYS	USUALLY	SELDOM	NEVER

5. Please rate the overall quality of the food and service you have received.

   EXCELLENT COOD FAIR POOR

6. Please make any additional comments:

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APPENDIX I

QUESTIONNAIRE

SURVEY RESULTS BY TEST SITE

CAFETERIA SERVICE

TABLE 4

SATISFACTION WITH
CAFETERIA SERVICE

		EXCELLENT	GOOD	FAIR	POOR
Hospital A.					
Month 1		8%	52%	24%	16
2		29	24	47	0
3		24	41	24	11
4		29	44	18	9
5		32	40	26	2
	Average	24.4	40.2	27.8	7.6
	x	15	10	5	0
	=	3.6	4.02	1.39	-
	Score	9.01			
Hospital B.					
Month 1		21%	52%	21.5%	2.5%
2		17.9	54.5	23.1	3.8
3		19.5	56.6	18.6	5.0
4		21.4	53.5	21.4	3.7
5		-	-	-	-
	Average	19.95%	54.15%	21.15%	3.75%
	x	15	10	5	0
	=	2.99	5.42	1.06	0
	Score	9.47			
Hospital C.					
Month 1		33%	52%	11%	9%
2		34	48	15	3
3		44	44	8	3
4		36	50	10	4
5		35	52	9	4
	Average	36.4%	49.2%	10.6%	4.6%
	x	15	10	5	0
	=	5.4	4.92	.53	0
	Score	10.85			
Hospital D.					
Month 1		51%	41%	8%	0%
2		51	41	8	9
3		34	50	11	5
4		33	49	15	3
5		35	49	10	6
	Average	40.8%	46%	8.8%	2.8%
	x	15	10	5	0
	=	6.12	4.4	.44	0
	Score	11.16			

TABLE 4 (Continued)

Hospital E.					
Month 1		- %	- %	- %	- %
2		45	40	14	1
3		45	42	3	0
4		44	48	8	0
5		50	43	7	0
	Average	46%	43.25%	8%	1%
	x	15	10	5	0
	=	6.9	4.33	.4	-
	Score	11.63			
Hospital F.					
Month 1		48%	40%	9%	2%
2		-	-	-	-
3		21	56	19	4
4		40	45	12	2
5		43	43	13	0
	Average	38%	46%	13.25%	2%
	x	15	10	5	0
	=	5.7	4.6	.7	0
	Score	11.0			
Hospital G.					
Month 1		4%	42%	33%	16%
2		20	46	26	12
3		-	-	-	-
4		-	-	-	-
5		30	55	21	1
	Average	18%	48%	26.6%	15.3%
	x	15	10	5	0
	=	2.7	4.8	1.33	-
	Score	8.83			

APPENDIX J

QUESTIONNAIRE

SURVEY RESULTS BY TEST SITE

PROVIDER SATISFACTION WITH PATIENT TRAY SERVICE

AND

NUTRITIONAL COUNSELING

PROVIDER SATISFACTION SURVEY DATE_____

A study is being conducted on Food Service Quality Assurance which the hospital Food Service Division is participating in. Part of this study requires that the opinions of health care providers (Physicians, Nurses, Physical Therapists, Occupational Therapists, etc.) be surveyed concerning the quality of food and the nutritional treatment and counseling provided to patients by the Food Service Division. The object is to determine the quality of services provided the patient. Therefore, please try to answer the following questions based on how well you feel the Food Service Division provides or enhances the patient treatment or service that you requested, supervise, or provide and avoid interjecting opinions about service provided to you as an individual. Please circle your answer or fill in the blank. Thank you for your assistance.

1. What is your profession (MD,RN, LPN, OT, etc) _____Military or Civilian (please circle)

2. How long have you been assigned to or worked with this hospital _____years?

3. Please evaluate the following aspects of Food Service.

a. Do your patients receive the diet ordered for them?	ALWAYS	USUALLY	SELDOM	N/A
b. Do you feel that the hot food served to your patients is adequately hot?	ALWAYS	USUALLY	SELDOM	N/A
c. Do you feel that the cold food served to your patients is adequately cold?	ALWAYS	USUALLY	SELDOM	N/A
d. Do you feel that the variety of foods offered to your patients is adequate.	ALWAYS	USUALLY	SELDOM	N/A
e. Do you feel that the standard diets available (soft, Na/R, liquid, etc) are adequate for you to order from?	ALWAYS	USUALLY	SELDOM	N/A
f. Do you feel that the food is served as attractively as possible considering diet limitations?	ALWAYS	USUALLY	SELDOM	N/A
g. Do you feel that the type of service (trays, utensils, etc) meet the needs of your patients? Can the patient eat from the tray without undue difficulty?	ALWAYS	USUALLY	SELDOM	N/A
h. Are the meal service times adequate to meet your patients needs?	ALWAYS	USUALLY	SELDOM	N/A
i. Do patient meal service times interfere with patient treatment? (Rounds, clinic schedules, etc.)	ALWAYS	USUALLY	SELDOM	N/A

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j. What is your overall evaluation of the food service provided to your patients? EXCELLENT GOOD FAIR POOR

4. Please evaluate the following aspects of Nutritional Services. (Please consider in and outpatient services unless otherwise indicated.)

a. Do you feel that there is adequate contact between your patients (in-patients) and food service personnel? ALWAYS USUALLY SELDOM N/A

b. Do you feel that you and/or your patients received an adequate response when assistance is requested on a dietary or nutritional problem? ALWAYS USUALLY SELDOM N/A

c. Do you feel that sufficient time is spent with patients to provide the required dietary treatment? ALWAYS USUALLY SELDOM N/A

d. Do you feel that your patients received the dietary treatment or counseling that was intended or was needed? ALWAYS USUALLY SELDOM N/A

e. Do you feel that the dietary treatment programs that are available, particularly for chronic problems such as obesity and diabetes are sufficient? YES NO

f. How do you rate the nutritional treatment received by patients served by this hospital? EXCELLENT GOOD FAIR POOR

TABLE 5

PROVIDER SATISFACTION WITH PATIENT TRAY SERVICE AND NUTRITION COUNSELING
(RESPONSES TO QUESTIONS 3j and 4f)

Hospital A.

	FOOD SERVICE (3j)				NUTRITIONAL SERVICE (4f)			
	EXCELLENT	GOOD	FAIR	POOR	EXCELLENT	GOOD	FAIR	POOR
	25%	42.5%	7%	-	46%	49%	6%	0
x	15	10	5	8	15	10	5	0
	3.75	4.25	.375	-	6.9	4.9	.03	-
Score	8.38				12.1			

a) # Questionnaires Distributed 84
b) # Questionnaires Returned 55
c) > 80% confident of representative sample

$$N = 85^{1}\ Z_{.80}=1.28\ \frac{8(1.26^{2}\ (.5)\ (.5)}{84(1.05^{2}+(1.28)^{2}(.25)} = 56^{2}$$

Hospital B.

	FOOD SERVICE (3j)				NUTRITIONAL SERVICE (4f)			
	15%	56%	27%	1%	23%	62%	13%	2%
x	15	18(	5	0	15	10	5	0
	2.25	5.6	1.35	8	3.45	6.2	.65	0
Score	9.2				10.3			

a) # Questionnaires Distributed 220
b) # Questionnaires Returned 128
c) >80% confident of representative sample

$$N = 505^{1}\ Z_{.80}=\frac{1.28\ 505\ (1.28)^{2}(.5)(.5)}{584(.05)^{2}+(1.28)^{2}(.25)} = 123^{2}$$

TABLE 5 (Continued)

FOOD SERVICE (3j)

Hospital C.

	17%	65.5%	17.2%	-
x	15	10	5	0
	6.55	2.59	.86	0
Score	10.0			

a) # Questionnaires Distributed 110
b) # Questionnaires Returned 87
c) >80% confident of representative sample

$$N = 191^{1}\ Z_{.80}=1.28\ \frac{191(1.28)^{2}(.5)(.5)}{190(.05)^{2}+(1.28)^{2}(.25)} = 88^{2}$$

NUTRITIONAL SERVICE (4f)

	20%	66%	12%	1%
x	15	10	5	0
	3	6.6	.6	1
Score	10.2			

FOOD SERVICE (3j)

Hospital D.

	18.4%	61.5%	19.3%	-
x	15	10	5	0
	2.45	6.15	.97	0
Score	9.87			

a) # Questionnaires Distributed 190
b) # Questionnaires Returned 127
c) >80% Confident of representative sample

$$N = 626^{1}\ Z_{.80} = 1.28\ \frac{626(1.28)^{2}(.25)}{625(.05)^{2}+(1.28)^{2}(.25)} = 102^{2}$$

NUTRITIONAL SERVICE (4f)

	23%	55%	23%	0
x	15	10	5	0
	3.45	5.5	1.15	0
Score	10.1			

TABLE 5 (Continued)

Hospital E.

	FOOD SERVICE (3j)				NUTRITIONAL SERVICE (4f)			
	22.5	59.%	19.5%	-	27%	51%	22%	0
x	15	10	5	0				
	3.38	5.9	.975	-	4.05	5.1	1.1	0
Score	10.25				Score 10.25			

a) # Questionnaires Distributed 130
b) # Questionnaires Returned 87
c) > 80% confident of representative sample

$$N = 256^{1}\ Z_{.80}\ 1.28\ \frac{256(1.28)^2(.25)}{255(.05)^2 + (1.28)^2(.25)} = 78^{2}$$

Hospital F.

	FOOD SERVICE (3j)				NUTRITIONAL SERVICE (4f)			
	15%	60%	22%	3	17%	61%	12%	1%
x	15	10	5	0	x 15	10	5	0
	2.25	6.0	1.1	0	2.55	6.1	.6	0
Score	9.35				Score 9.25			

a) # Questionnaires Distributed 145
b) # Questionnaires Returned 81
c) >80% confident of representative sample

$$N = 308^{1}\ Z_{.80}\ 1.28 = \frac{308(1.28)^2(.25)}{307(.05)^2 = (1.28)^2(.25)} = 46^{2}$$

Provider satisfaction questionnaires with the exception of Fort Leavenworth were distributed and collected by the Administrative Resident (there is not resident at Fort Leavenworth so the Chief of Food Service conducted the survey). Each resident was instructed on how many questionnaires to a specific type of provider, i.e., MD, RN, etc. Questionnaires were returned to the researcher where he tabulated the returns. The total number of responses at all test facilities were sufficient to indicate at least an 80% confidence level that the results were representative of the opinion of the staff about the quality of food service and nutritional counseling received by the patients.

FOOTNOTES

[1]N is the total number of physicians, registered nurses, licensed occupation nurses (and the military equivalents), physical therapists and occupation therapists assigned or employed by the hospital. Figures were supplied by US Army Health Services Command.

[2]The number of responses required to obtain an 80% confidence level.

APPENDIX K

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